



# United States Department of the Interior



## BUREAU OF LAND MANAGEMENT

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In Reply Refer To:  
4120 (NVE03000)

### **VEGETATION TREATMENT DECISION RUBY #6 ALLOTMENT**

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Dear Reader,

#### **INTRODUCTION**

This Decision will authorize the following vegetation treatments in the Ruby #6 Allotment: 1) multiple treatment mowing of rabbitbrush-encroached saline bottoms, and 2) mechanical reduction followed by drill seeding of select sagebrush communities. Multiple treatment mowing will be applied on up to 2,000 acres; sagebrush rehabilitation treatments will be applied on up to 1,900 acres. Treatments have been specifically developed to address inadequacies in existing wildlife and sage-grouse habitat and improve connectivity between priority sage-grouse habitats.

#### **BACKGROUND**

On 29 October 2013, the Wells Field Office released a Draft Standards and Guidelines for Rangeland Health (S&G) Assessment for the Ruby #6 Allotment. This assessment synthesized all available data on the allotment, developed draft determinations as to the attainment of the Standards and Guidelines for Rangeland Health, and provided basic management recommendations. The Draft S&G Assessment determined that 1) Standard 1 - Upland Sites and

Standard 4 - Cultural Resources were being met and management was in conformance with applicable guidelines; 2) Standard 2 - Riparian and Wetland Sites and Standard 3 - Habitat, were not being met and management was not in conformance with applicable guidelines; and 3) Standard 5 – Healthy Wild Horse and Burro Populations did not apply to this Allotment. The BLM received one comment letter previous to the release of this draft S&G Assessment, but no comments during the specified comment period. The one comment received is addressed in Appendix C of the Environmental Assessment (EA).

On 05 September 2014, the Wells Field Office released an EA (EA # DOI-BLM-NV-E030-2014-0013-EA) that analyzed a Proposed Action Alternative, a No Action Alternative, and a No Grazing Alternative. The Proposed Action Alternative included actions that would 1) reduce active preference and livestock grazing during the growing season, 2) modify range improvements, 3) lower utilization objectives to more conservative levels, 4) realign pasture fences to balance acreage, and 5) rehabilitate up to 3,900 acres of saline bottom and sagebrush shrubland communities. The EA remained available for public review through 05 October 2014. One comment was received during the review period. This comment is addressed in Appendix C of the EA. In connection with this comment and further review of the document, the BLM made minor changes to the EA; including the creation of Appendix D, which concisely outlines project procedures associated with the Proposed Action Alternative. These changes did not meaningfully modify the alternatives or their analysis. The BLM received one comment 11 days after the end of the comment period; this comment is also addressed in Appendix C.

On February 09, 2015, subsequent to the completion of the Ruby #6 Allotment Grazing Permit Renewal EA, the BLM Nevada State Office issued Instruction Memorandum (IM) 2015-017. This IM directed BLM to retroactively apply a USGS developed sage-grouse habitat map to all unsigned NEPA Decisions. This updated habitat map changes the acreage of Preliminary Priority Habitat (PPH), Preliminary General Habitat (PGH), Mapped Habitat, and Non-Habitat within the Ruby #6 Allotment, as follows (see also Map 1):

**Table 1.** Acreages of the various sage-grouse habitat designations on the Ruby #6 Allotment before (Original) and after (Revised) the issuance of Instruction Memorandum 2015-017.

<i>Sage-grouse Habitat Designation</i>	<b>Preliminary Priority Habitat</b>	<b>Preliminary General Habitat</b>	<b>Mapped Habitat</b>	<b>Non- Habitat</b>
<b>Original</b>	9028	476	n/a	5545
<b>Revised</b>	13378	7	1100	554

The original analysis of sage-grouse habitat in the Ruby #6 Allotment Grazing Permit Renewal EA included extensive ground-truthing and site specific evaluation of habitat metrics. All four of the sage-grouse specific key areas (SG-1-4 in Table 3 of Appendix A in the Draft S&G Assessment for the Ruby #6 Allotment) are located in PPH regardless of which map is used. Therefore, the analysis regarding the potential effects of the Proposed Action Alternative on sage-grouse and its habitat would remain unchanged. In addition, the Proposed Action Alternative is specifically designed to improve the vegetation composition of poor condition sagebrush steppe communities as verified *in situ* by BLM and NDOW specialists; i.e.,

implementation hinges on ground-truthed data and would occur in a similar manner regardless of which map is used.

The EA and the Final Determinations of the S&G Assessment for the Ruby #6 Allotment are posted for review on the Land Use Planning and NEPA Register website at:  
<http://1.usa.gov/1HMfHhv>

Through the EA process, the BLM determined there will be no significant impact as a result of implementing the proposed action, as documented in the enclosed Finding of No Significant Impact.

## **DECISION**

### **1. Multiple Treatment Mowing**

Multiple treatment mowing will be applied in the fall to reduce rubber rabbitbrush across 2,000 acres of Saline Bottom 6-8" PZ ecological sites. Multiple treatment mowing will involve mowing concurrent with herbicide treatment of the mowed areas. If possible, a wet blade mower will be used. Tordon (picloram) will be applied across the treatment area at a rate of one quart per acre. Herbicide uses and applications will be constrained by the Standard Operating Procedures (SOPs) and other mitigation measures adopted in the Final Programmatic Environmental Impact Statement for Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western States.

Homogeneous Saline Bottom 6-8" PZ ecological sites found on the western edge of the allotment – Group 1 within the Appendix, Map 2 – will be treated in their entirety. Saline Bottom 6-8" PZ ecological sites found in the northeast of the allotment – Group 2 within the Appendix, Map 2 – are found in a mosaic with Sodic Terrace 8-10" PZ ecological sites. Up to 50% of Group 2 will be treated; Sodic Terrace 8-10" PZ ecological sites will be avoided where possible. Within the targeted ecological site, the minimum acceptable shrub control rate is 70% and the maximum acceptable rate is 90%.

### **2. Sagebrush Habitat Rehabilitation**

Sagebrush habitat rehabilitation treatments will be applied in the fall to a maximum of 20% of the sage-grouse preliminary priority and general habitat (PPH and PGH) found within the allotment (see Appendix, Map 3). In total, up to 1,900 acres will be treated through mechanical sagebrush reduction and drill seeding of herbaceous species. Sagebrush reduction will be carried out using a mechanical mower with deck height set to six inches. Seeded species may include Indian ricegrass (*Achnatherum hymenoides*), bottlebrush squirreltail (*Elymus elymoides*), thickspike wheatgrass (*Elymus lanceolatus*), Sandberg bluegrass (*Poa secunda*) and scarlet globemallow (*Sphaeralcea coccinea*); seed availability may result in some modifications to the final seed mix. Sites proximal to the North Ruby Valley and West Valley Mountain lek complexes will be given the greatest treatment priority. Livestock watering wells and a 0.25 mile buffer around them will be excluded from treatment. Treatments will be installed in strips not more than 26 feet wide; contiguous blocks will not be treated.

### 3. Treatment Implementation

Vegetation treatments will occur following or concomitant with the enactment of the Ruby #6 Allotment Grazing Permit Renewal Decision that was released concurrent with this Decision. Vegetation treatments will be implemented one pasture at a time. Where both types of treatment will occur within a pasture, treatments will be applied concurrently if possible. Pasture A (multiple treatment mowing) will remain closed for three growing seasons following treatment. Pastures B and C (multiple treatment mowing and sagebrush rehabilitation) will remain closed for a minimum of three growing seasons, until the following rehabilitation objectives are met within the reseeded areas:

- Establishment of a minimum of three perennial grasses per square meter rooted firmly in the soil, with consideration to site selection factors such as soils, topography, native release of desirable species, and the potential for seedling establishment.
- Two thirds of the established seeded species have become reproductive.

If the rehabilitation objectives are not met after three years of growing season rest, additional analyses will be conducted by the BLM to reevaluate the suitability of the objectives. Some of the factors to be considered in this analysis would be: the total annual and growing season precipitation in the previous three years, wildlife use, unauthorized use by livestock, the benefits additional rest might provide, and how close monitoring sites are to meeting rehabilitation objectives. Consideration would be given to developing alternate strategies for objective achievement. If it is determined that additional rest is needed, the treated pasture will remain closed. If it is determined that the objectives cannot be met or additional rest is not needed, the treated pasture area will be re-opened to livestock grazing.

During treatment, total active preference will be cut by one third to 491 AUMs to account for the closed pasture. In the two open pastures, use will rotate between the spring and fall grazing periods as shown in Table 2. If at any time in the course of the treatment cycle all three pastures are open, grazing will follow the final grazing system (Table 3), modified as necessary in coordination with the BLM to account for which pastures were closed or grazed in the spring and fall in the previous year.

A potential schedule for the implementation of the vegetation treatments is shown in Table 2. This schedule is not final; rather, its purpose is to clarify how treatment timing will affect pasture closure and the interim grazing system. Within the parameters outlined above, treatment implementation will be largely adaptive to meet the needs of the resources, permittees, and the BLM.

**Table 2.** A potential vegetation treatment implementation schedule and interim grazing system, based on a three growing season minimum closure period between treatments. In this table, “Spring” and “Fall” indicate grazing that will occur during the defined grazing periods outlined in Table 3.

Year	Pasture		
	A	B	C
(Fall)	<b>Treatment</b>	-	-
1	Closed	Fall	Spring
2	Closed	Spring	Fall
(Fall)	-	<b>Treatment</b>	-
3	Fall	Closed	Spring
4	Fall	Closed	Spring
(Fall)	-	-	<b>Treatment</b>
5	Spring	Fall	Closed
6	Fall	Spring	Closed
7	Spring	Rest	Fall
8	<b><i>Resume normal grazing schedule</i></b>		

**Table 3.** Livestock grazing schedule for the Ruby #6 Allotment.

Pasture	Year 1	Year 2	Year 3	Year 4
A	5/15 - 7/14	Rest	10/1 - 11/30	Repeat Cycle
B	10/1 - 11/30	5/15 - 7/14	Rest	"
C	Rest	10/1 - 11/30	5/15 - 7/14	"

Maintenance of the treated areas may occur as needed after initial actions. Additional mowing or reseedling of the treated area will be applied if the original treatment does not result in sufficient reduction in woody species or increases in desirable herbaceous species. Maintenance may occur as needed up to fifteen years from the date of implementation. Adaptive management will be used to modify the timing, size of units, machinery, herbicide and seeded species in response to climatic conditions as well as to additional information that may become available in the course of time. Adaptive management will allow the best possible chance of promoting desirable herbaceous grass and forb species while reducing rubber rabbitbrush and increasing the structural diversity of sagebrush.

#### 4. Updating Active Preference

At the conclusion of the vegetation treatment cycle, carrying capacity on the allotment will be reevaluated and active preference will be updated to reflect existing conditions.

## **RATIONALE**

Multiple treatment mowing is planned primarily for Saline Bottom 6-8” PZ ecological sites found within the Allotment. The Rangeland Ecological Site Description developed by the Natural Resources Conservation Service (NRCS) for this ecological site specifically states:

*“As ecological condition declines, black greasewood and rubber rabbitbrush increase, while basin wildrye and alkali sacaton decrease. With further site degradation, rubber rabbitbrush typically becomes the dominant species.”*

Currently, rubber rabbitbrush (*Ericameria nauseosa*) dominates this ecological site to the exclusion of almost all other species. The planned treatment is specifically designed to shift competitive dynamics within this ecological site in favor of herbaceous species such as basin wildrye (*Leymus cinereus*) and alkali sacaton (*Sporobolus airoides*) that dominate in healthy potential natural communities. If the control rates set in this Decision are achieved, shrub composition will be reduced to levels appropriate to the site. This would provide a recovery window for residual herbaceous species. Herbaceous species such as basin wildrye and alkali sacaton are unable to compete with fully established woody species such as rubber rabbitbrush. However, if shrubs are limited and livestock grazing is properly managed these herbaceous species are capable of limiting the encroachment of woody species and stabilizing the plant community.

Stable saline bottom communities that have been restored to resemble the potential natural community will provide superior wildlife habitat and will reduce pressure on riparian areas. Pronghorn antelope specifically would benefit from the reduced height and presence of rubber rabbitbrush and the concurrent increase in herbaceous species. The increased herbaceous component would also improve the connectivity value of this ecological site for sage-grouse moving between priority habitats. Riparian improvements will be brought about as healthy uplands balance livestock distribution, taking pressure off of the small riparian area found on the Allotment.

In the absence of human intervention, the current state of shrub dominance will likely check any passive attempts (e.g. changes to livestock grazing) to restore appropriate balance between herbaceous and woody species, i.e. passive restoration is no longer an option in the Saline Bottom 6-8” PZ ecological sites found in the Allotment. A number of studies have specifically looked at the effect of livestock removal on herbaceous recovery in shrub dominated communities. These studies generally conclude that community composition retains its initial proportions in the short- and mid-term even when livestock are completely removed. Accordingly, while degraded, saline bottom communities in the Allotment will remain stable in the absence of energy input.

Single method types of treatment (e.g. mowing or herbicide treatment alone) typically fail to effectively control species such as rubber rabbitbrush and black greasewood (*Sarcobatus vermiculatus*) that are capable of resprouting. However, treatments that include multiple methods (e.g. multiple treatment mowing) have been shown to be successful in rehabilitating communities encroached by resprouting species.

Sagebrush treatments were specifically designed using the best available science to enhance and protect sage-grouse habitat. The following Western Association of Fish and Wildlife Agencies (WAFWA) Guidelines specifically state that:

*1) Where the sagebrush overstory is intact but the understory has been degraded severely and quality of nesting habitat has declined, use appropriate techniques (e.g., brush beating in strips or patches and interseed with native grasses and forbs) that retain some sagebrush but open shrub canopy to encourage forb and grass growth.*

*2) Use brush beating or other mechanical treatments in strips 13-26 feet wide in areas with relatively high shrub-canopy cover (>35% total shrub cover) to improve late brood-rearing habitats. Brush beating can be used to effectively create different age classes of sagebrush in large areas with little age diversity.*

The conditions outlined in these guidelines perfectly mirror the conditions found in the Ruby #6 Allotment, while the management techniques forwarded are in step with the methods outlined in this Decision. In their current state, sagebrush communities in the Allotment are degraded, with even-aged stands of largely decadent, mature sagebrush individuals and very limited herbaceous species. Under current conditions, sagebrush reduction or herbaceous reseeding alone would not be effective in rehabilitating these communities. In the first case, competition is removed but residual vegetation and a local seed sources are lacking; in the second, plant materials are present but cannot establish due to competition. The best available science asserts that when desired species or structural groups are poorly represented in these types of communities, active restoration or rehabilitation is warranted.

Sagebrush habitat rehabilitation treatments would improve habitat quality for sage-grouse by improving the structural, age class, functional group, and species diversity of these habitats. A maximum 26 foot treatment width would enable the natural recolonization of treated areas by sagebrush, precluding the need to seed this species or set a maximum control rate. The native species that will be used are adapted to this area and the primary seeded species, Indian ricegrass (*Achnatherum hymenoides*), is a crucial component of these communities that is currently almost completely absent.

Recently, as the risks to sage-grouse have become clear, the utility of mowing and reseeding sagebrush communities has been looked at in depth. In reviewing the best available science on the topic, it is apparent that the concerns that have been raised are not applicable to the Ruby #6 Allotment. Table 9 in the EA reviews these concerns in depth. Based on the available data, it is our conclusion that the proposed treatments will result in significant progress being made towards improving sage-grouse habitat quality in the sagebrush shrublands found in the Allotment. The rehabilitation of these shrublands will constitute a major step towards improving the nesting habitat of sage-grouse in this area. This is especially important as the Allotment is two to five miles from a complex of crucial sage-grouse leks.

In concert with the actions outlined in the Ruby #6 Allotment Grazing Permit Renewal Decision, these vegetation treatments will serve as catalysts, restoring damaged ecosystem processes and functions, enabling existing plant communities to cross thresholds to desirable alternative states. In summary, the actions in this decision – together with the actions in the Ruby #6 Allotment Grazing Permit Renewal Decision – will result in significant progress being made towards meeting Standard 2 – Riparian and Wetland Sites and Standard 3 – Habitat.

### **AUTHORITY**

Authority for the actions contained in this decision is found in 43 CFR §4100.0-8, 4110.2-2, 4110.3, 4120.2, 4120.3-1, 4130.2 (a), (b), (d), and (e), 4130.3, 4130.3-1, 4130.3-2, 4130.3-3, 4130.8-1(e), 4160.1, 4160.2, 4160.3, 4160.4, 4180.1, and 4180.2.

### **PROVISIONS FOR PROTEST, APPEAL AND PETITION FOR STAY**

#### *Protest*

In accordance with 43 CFR §4160.2, any applicant, permittee, lessee or other interested public may protest the decision under §4160.1 of this title, in person or in writing to the Bureau of Land Management, Melanie Peterson, Wells Field Office Manager (authorized officer), 3900 E. Idaho Street, Elko, Nevada, 89801 within 15 days after receipt of this decision. The protest, if filed, must clearly and concisely state the reason(s) as to why the decision is in error. Emailed protests will not be accepted.

In accordance with 43 CFR §4160.3 (b), should a timely protest be filed with the authorized officer, the authorized officer, at the conclusion to his/her review of the protest shall serve his/her final decision on the protestant and the interested public.

In accordance with 43 CFR §4160.3 (a), at the conclusion of the 15 day protest period and in the absence of a protest, the decision will become the final decision of the authorized officer without further notice.

In accordance with 43 CFR §4160.3 (c) & (f), a period of 30 days following receipt of the Final Decision or 30 days after the date the Decision becomes final is provided for filing an appeal and petition for stay of the decision pending final determination on appeal.

#### *Appeal*

In accordance with 43 CFR §4160.4, any person whose interest is adversely affected by a final decision of the authorized officer may appeal the decision for the purpose of a hearing before an administrative law judge and may also petition for a stay of the decision pending final determination on appeal. The appeal and petition for stay must be filed within 30 days following receipt of the final decision or 30 days after the date the decision becomes final. Appeals and petitions for a stay of the decision shall be filed at the office of the authorized officer, see Protest above. Additionally the person appealing must serve a copy of their appeal and petition for stay on any person named in the decision including the name to which the decision is addressed,



those listed at the end of this decision, and the Office of the Solicitor, Pacific Southwest Region, U.S. Department of the Interior, 2800 Cottage Way, Room E-2753, Sacramento, CA 95825-1890 within 15 days of filing the appeal and petition for stay. Appellant needs to be able to document service to any other person named in the decision and the Solicitor.

In accordance with 43 CFR §4.470, the appeal shall state the reasons, clearly and concisely, why the appellant thinks the final decision of the authorized officer is in error.

A petition for stay, if filed, must show sufficient justification based on the following standards (43 CFR §4.471(c)):

- (1) The relative harm to the parties if the stay is granted or denied;
- (2) The likelihood of the appellant's success on the merits;
- (3) The likelihood of immediate and irreparable harm if the stay is not granted; and,
- (4) Whether the public interest favors granting the stay.

The appellant requesting a stay bears the burden of proof to demonstrate that a stay should be granted.

Any person named in the decision from which an appeal is taken (other than the appellant) who wishes to file a response to the petition for a stay may file with the Hearings Division a motion to intervene in the appeal, together with the response, within 10 days after receiving the petition. Within 15 days after filing the motion to intervene and response, the person must serve copies on the appellant, the Office of the Solicitor and any other person named in the decision (43 CFR §4.472(b)).

/s/ Melanie A. Peterson

7/21/2015

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Melanie A. Peterson  
Field Manager, Wells Field Office

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Date

cc:

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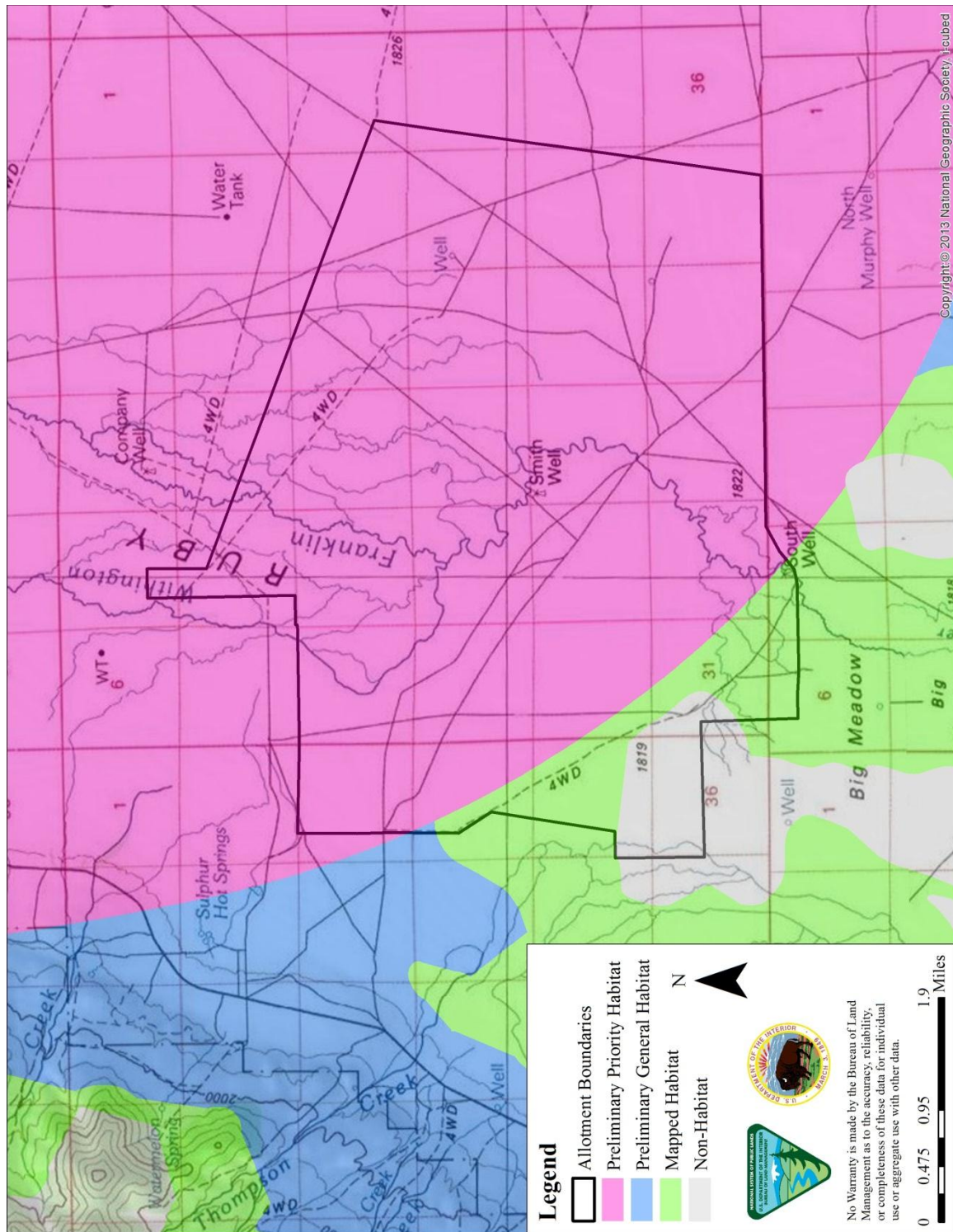
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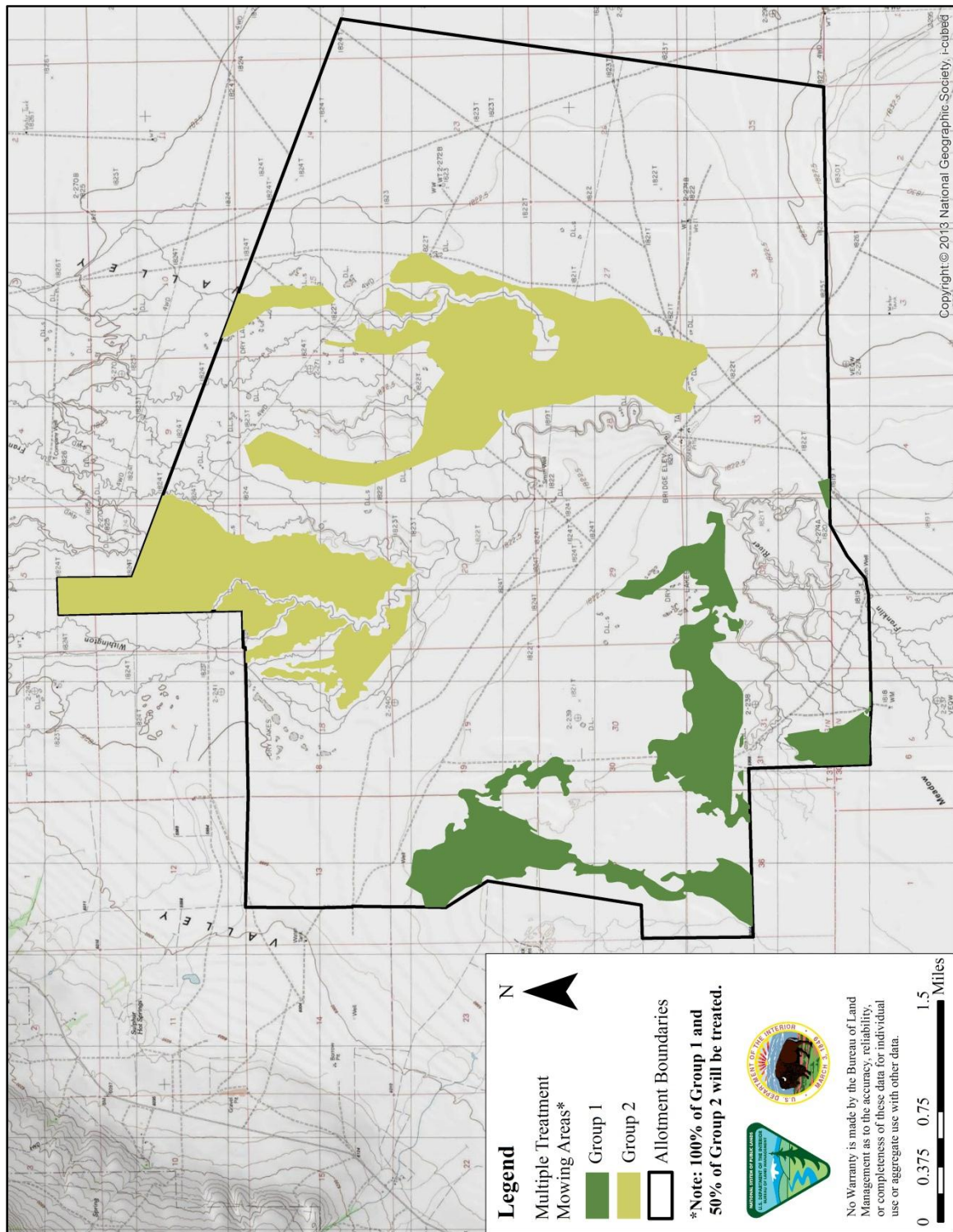
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## APPENDIX

**Map 1.** Revised Ruby #6 Allotment sage-grouse habitat map. Sage-grouse habitat categories were developed by the U.S. Geological Survey, as defined in Bureau of Land Management Instructional Memorandum 2015-017.



**Map 2.** Multiple treatment mowing areas within the Ruby #6 Allotment. All of Group 1 will be treated; 50% of Group 2 will be treated.





**Map 3.** Potential sagebrush rehabilitation treatment area within the Ruby #6 Allotment; only 20% of the potential area would be treated.

